Transportation for the Nation 2008 2009

Issue Brief by the National States Geographic Information Council

Problem Statement

Street networks (road centerline data) are one of the most widely used geospatial information products in today's society. They support E-911 dispatching, mail and parcel delivery, response and relief efforts during major disasters, online sales tax collection, mapping, geo-coding, intelligent transportation systems, and automated vehicle routing and location systems, to name but a few applications. Their use is pervasive in American society, yet there are scant figures available to demonstrate the true value of street network data to society.

So far, nationwide programs that collect and assimilate transportation geospatial data from local, state, regional and federal sources are usually done with a single purpose, rather than a multi-purpose use, in mind. Several commercial data providers buy, partner, or recreate the data produced by government agencies. In the absence of an effective and organized national program, and without incentives to cooperate, each level of government continues duplicate efforts by creating these data to meet only their specific business needs. This practice leads to duplicative spending, wasted taxpayer dollars and inefficient government. The true business value of shared transportation geospatial data is only beginning to be realized.

Vision for the Future

The federal government will coordinate development of a seamless nationwide dataset of addressable roads that is built in a collaborative and shared environment. It will be comprised of local roads data containing current and accurate address information utilized for 911, statewide road centerline data managed by state GIS organizations, state highway data managed by State DOTs that meets linear referencing needs, and other roads data from regional (Metropolitan Planning Organizations), tribal, federal and other sources.

Actions Required to Achieve Vision

Sufficient resources are being expended on uncoordinated efforts at all levels of government and the private sector, to fund the development of a comprehensive and collaborative nationwide street network. However, incentives to coordinate must be put in place and a coordination framework must be developed.

NSGIC calls on the Federal Geographic Data Committee to work through the U.S. Department of Transportation and U.S. Census Bureau to:

- Fulfill DOT's obligation under OMB Circular A-16 and Executive Order 12906 to coordinate transportation data for the National Spatial Data Infrastructure (NSDI).
- Congress should fund development of a business plan ($500,000) and program implementation as appropriate. The Business Plan must identify the coordination infrastructure and incentive programs required to develop a national transportation dataset. This planning effort must:

- Engage transportation stakeholders to create local, regional, statewide, inter-state, and national transportation databases, which build upon municipal and county governments with the best available transportation data.
- Review and assess federal, state, regional, local, and commercial transportation data to determine opportunities for cost-savings, to identify best practices and lessons learned, and to review existing transportation data models.
- Look for new opportunities to share transportation infrastructure and street network data to promote more efficient government and for the betterment of the public and private sectors.
- Recognize the need for data to be developed locally, with regional and state custodians acting as integrators, to merge local street network data into region-wide and statewide databases to support interstate and national data needs.

Who Must Be Involved

- Federal Highway Administration
- Census Bureau
- American Association of State Highway Transportation Officials (AASHTO)
- National Academies of Science, Transportation Research Board (TRB)
- National Association of State 911 Administrators (NASNA)
- National Association of Counties (NACo)
- Urban and Regional Information Systems Association (URISA)
- Geospatial Information Technology Association (GITA)
- State Geographic Information Officers/State Chief Information Officers (GIO/CIO)
- State Departments of Transportation Contacts
- National States Geographic Information Council (NSGIC)
- Public Land Agencies
- Other organizations

ABOUT NSGIC — The National States Geographic Information Council (NSGIC) is a 501 (c)(6) organization of States committed to efficient and effective government through the prudent adoption of geospatial information technologies. Members of NSGIC include delegations of state GIS coordinators and senior state GIS managers from across the United States. Other members include representatives from Federal agencies, local government, the private sector, academia and other professional organizations. A rich and diverse group, the NSGIC membership includes nationally and internationally recognized experts in GIS, geospatial data production and management, and information technology policy.

2105 Laurel Bush Road
Bel Air, Maryland 21015
443-640-1075 x110
443-640-1031 FAX
Fred@ksgroup.org
http://www.nsgic.org